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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,256	07/03/2003	Gerhard Reichert	1663-AI	4893

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EXAMINER

AMIRI, NAHID

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 09/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/613,256

Applicant(s)

REICHERT, GERHARD

Examiner

Nahid Amiri

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 02 June 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 29, 30 and 40-61 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 29, 30 and 40-61 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 June 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>exhibit</u> . |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-6, 29 and 40-44 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent No. 5,732,517 Milikovsky.

In regard to claims 1 and 29: Milikovsky discloses (Fig. 2) (column 2, lines 5-19) having a spacer (10) adapted to be disposed between opposed panes of glass (8) and (12) in a glazing unit; the spacer (10) including a body (B) (see attachment) formed from a body material having opposed base walls (W) (see attachment) separated by the height of the body (B); each base wall (W) adapted to be disposed adjacent an interior surface of the glass panes (8 and 12); the body (B) defining at least one insulating cavity (C) (see attachment) which insulating cavity (C) having a cross sectional area and being surrounded by the body (B); (column 2, lines 57-61) silicon adhesive used to seal the two panes (8 and 12) hermetically; and the body material having a cross section which is greater than the cross sectional area of the insulating cavity (C).

In regard to claims 2-3: Milikovsky discloses (Fig. 2) the body (B) defines a longitudinal direction and insulating cavity (C) extending continuous in the longitudinal direction.

In regard to claim 4: Milikovsky discloses (Fig. 2) the spacer (10) wherein the body (B) defines a plurality of insulating cavities (C); and each of the insulating cavities (C) extending continuously in the longitudinal direction.

In regard to claims 5-6: Milikovsky discloses (Fig. 2) the insulating cavities (C) are spaced from one another and each insulating cavity has a width; and the space between the insulating cavities (C) being equal to the width of the either insulating cavity (C).

In regard to claims 40-41: Milikovsky discloses (Fig. 2) the body (B) defines a longitudinal direction and insulating cavity (C) extending continuous in the longitudinal direction.

In regard to claims 42-44: Milikovsky discloses (Fig. 2) the spacer (10) wherein the body (B) defines a plurality of insulating cavities (C), each of the insulating cavities (C) extending continuously in the longitudinal direction; the insulating cavities (C) are spaced from one another and each insulating cavity has a width; and the space between the insulating cavities (C) being equal to the width of the either insulating cavity (C).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 30, 45-52 and 58-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milikovsky as applied to claims 1-6, 29 and 40-44 above, and further in view of US Patent No. 5,007,217 Glover et al.

In regard to claim 7: Milikovsky discloses the claimed invention except for the body being fabricated from a foam material. Glover et al., teach (Fig. 1) (column 6, lines 59-62) the body of spacer (40) is formed from foam material. It would have been obvious to one of ordinary skill in the art at the time of invention was made to formed the body's invention of Milikovsky from foam material as taught by Glover et al., in order to have body with durability, good resilience, high temperature stability and cold temperature flexibility.

In regard to claim 8: Milikovsky discloses the claimed invention except for the body including a desiccant. Glover et al., teach (column 7, lines 5-6) the foam including the desiccant. It would have been obvious to one of ordinary skill in the art at the time of invention was made

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to provide the body of Milikovsky with a desiccant as taught by Glover et al., in order remove moisture vapor from the body.

In regard to claim 45: Milikovsky discloses the claimed invention except for the body is fabricated from a foam material. Glover et al., teach (Fig. 1) (column 6, lines 59-62) the body of spacer (40) is formed from foam material. It would have been obvious to one of ordinary skill in the art at the time of invention was made to formed the body's invention of Milikovsky from foam material as taught by Glover et al., in order to have body with durability, good resilience, high temperature stability and cold temperature flexibility.

In regard to claim 46: Milikovsky discloses the claimed invention except for the body includes a desiccant. Glover et al., teach (column 7, lines 5-6) the foam including the desiccant. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the body's invention of Milikovsky with desiccant as taught by Glover et al., in order remove moisture vapor from the body.

In regard to claims 30 and 51: Milikovsky discloses (Fig. 2) (column 2, lines 5-19) a spacer (10) adapted to be disposed between opposed panes of glass (8 and 12) in a glazing unit; the spacer (10) including a body (B) formed from body material having opposed base walls (W) separated by the height of the body (B); each base wall (W) adapted to be disposed adjacent an interior surface of the glass panes (8 and 12); the body (B) defining at least one insulating cavity (C) which insulating cavity (C) having a cross sectional area and being entirely surrounded by the body (B); (column 2, lines 57-61) silicon adhesive used to seal the two panes (8 and 12) hermetically ; the body material having a cross section which is greater than the cross sectional area of the insulating cavity (C); and the body (B) defining a longitudinal direction and insulating cavity(C) extending continuous in the longitudinal direction. Milikovsky does not disclose the body formed from resilient foam. Glover et al., teach (Fig. 1) (column 6, lines 59-62) the body of spacer (40) is formed from foam, which inherently is resilient. It would have been obvious to one of ordinary skill in the art at the time of invention was made to body's invention of Milikovsky from resilient material as taught by Glover et al., in order to have body with durability, good resilience, high temperature stability and cold temperature flexibility.

In regard to claim 47: Milikovsky discloses (Fig. 2) the body (B) defines a longitudinal direction and insulating cavity (C) extending continuous in the longitudinal direction.

In regard to claims 48-50: Milikovsky discloses (Fig. 2) the spacer (10) wherein the body (B) defines a plurality of insulating cavities (C), each of the insulating cavities (C) extending continuously in the longitudinal direction; the insulating cavities (C) are spaced from one another and each insulating cavity has a width; and the space between the insulating cavities (C) being equal to the width of the either insulating cavity (C).

In regard to claims 58 and 61: Milikovsky discloses (Fig. 2) (column 2, lines 5-19) having a spacer (10) adapted to be disposed between opposed panes of glass (8) and (12) in a glazing unit; the spacer (10) including a body (B) having a base wall (W) adapted to be connected to an interior surface of one of the glass panes (8 and 12), the body (B) having a longitudinal direction; (column 2, lines 57-61) an adhesive disposed on the base wall (W), the adhesive adapted to connect the body (B) to one of the glass panes (8 and 12); the body (B) having a height extending in direction between the glass panes (8 and 12), the width being greater than the height; the body defining at least three open elongated insulating cavity (C) being elongated in the longitudinal direction, the insulating cavity (C) having a cross section area, being surrounded by the body (B); the base wall (W) having the adhesive defining a body width; and the body material of the body (B) having a cross sectional area which being larger than the cross sectional area of the insulating cavity (C). Milikovsky does not disclose the body being formed from a foamed material and capable of being rolled into a roll for storage and shipping and then unrolled for application to the glass. Glover et la., teach (Fig. 1) (column 6, lines 59-62) the body of spacer (40) is formed from foam which inherently capable of being rolled into a roll for storage and shipping and then unrolled for application to the glass. It would have been obvious to one of ordinary skill in the art at the time of invention was made to body's invention of Milikovsky from resilient material as taught by Glover et al., in order to have body with durability, good resilience, high temperature stability and cold temperature flexibility.

In regard to claim 59: Milikovsky discloses (Fig. 2) the insulating cavities (C) are spaced from one another and each insulating cavity has a width; and the space between each pair of insulating cavities (C) being equal to the width of the either insulating cavity (C).

In regard to claims 52 and 60: Milikovsky discloses the claimed invention except for the body includes a desiccant. Glover et al., teach (column 7, lines 5-6) the foam including the desiccant. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the body's invention of Milikovsky with desiccant as taught by Glover et al., in order remove moisture vapor from the body.

Claims 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Milikovsky in view of US Patent No. 5,156,894 Hood et al.

In regard to claim 53: Milikovsky discloses (Fig. 2) (column 2, lines 5-19) having a spacer (10) adapted to be disposed between opposed panes of glass (8) and (12) in a glazing unit; the spacer (10) including a body (B) having a base wall (W) adapted to be connected to an interior surface of one of the glass panes (8 and 12), the body (B) having a longitudinal direction; (column 2, lines 57-61) an adhesive disposed on the base wall (W), the adhesive adapted to connect the body (B) to one of the glass panes (8 and 12); the body (B) having a height extending in direction between the glass panes (8 and 12), the width being greater than the height; the body defining at least three open elongated insulating cavity (C) being elongated in the longitudinal direction, the insulating cavity (C) having a cross section area, being surrounded by the body (B); the base wall (W) having the adhesive defining a body width; and the body material of the body (B) having a cross sectional area which being larger than the cross sectional area of the insulating cavity (C). Milikovsky does not disclose the body being formed from a foamed polymer. Hood et al., teach (Fig. 1) (column 8, lines 54-58) the body of spacer is formed from foam polymer. It would have been obvious to one of ordinary skill in the art at the time of invention was made to formed the body of Milikovsky from foam polymer as taught by Hood et al., in order to have body with durability and high exceptional thermal insulation performance.

In regard to claims 54-56: Milikovsky discloses (Fig. 2) the spacer (10) wherein the body (B) defines a plurality of insulating cavities (C), each of the insulating cavities (C) extending

continuously in the longitudinal direction; the insulating cavities (C) are spaced from one another and each insulating cavity has a width; and the space between the insulating cavities (C) being equal to the width of the either insulating cavity (C).

Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Milikovsky and Hood et al., as applied to claims 53-56 above, and further in view of Glover et al.

In regard to claim 57: Milikovsky and Hood et al., disclose the claimed invention except for the body includes a desiccant. Glover et al., teach (column 7, lines 5-6) the foam including the desiccant. It would have been obvious to one of ordinary skill in the art at the time of invention was made to provide the body's invention of Milikovsky with desiccant as taught by Glover et al., in order remove moisture vapor from the body.

Response to Arguments

Applicant's arguments filed 02 June 2005 have been fully considered but they are not persuasive.

In response to applicant argument that, in the insulating glazing art, muntin bars are independent and distinct from spacers, and that the Examiner set forth that the Office's position that muntin bar inventions are distinct from spacer inventions, it should be noted that patentability is based on the language of the claims and elements are defined by their recited structure and not how they are intended to be used. Accordingly, while Milikovsky may refer to element (10) as a first spacer means, this does not obviate the fact that instant claim 1 reads on this structure. The applicant further submits that the examiner cannot rely on the drawings to show particular sizes. The examiner notes that the drawings have not been relied upon to show particular sizes. Rather, the drawings have been relied upon for the relative dimensioning therein.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nahid Amiri whose telephone number is (571) 272-8113. The examiner can normally be reached on 8:30-5:30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571) 272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Nahid Amiri
Examiner
Art Unit 3679
August 16, 2005



DANIEL P. STODOLA
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3600

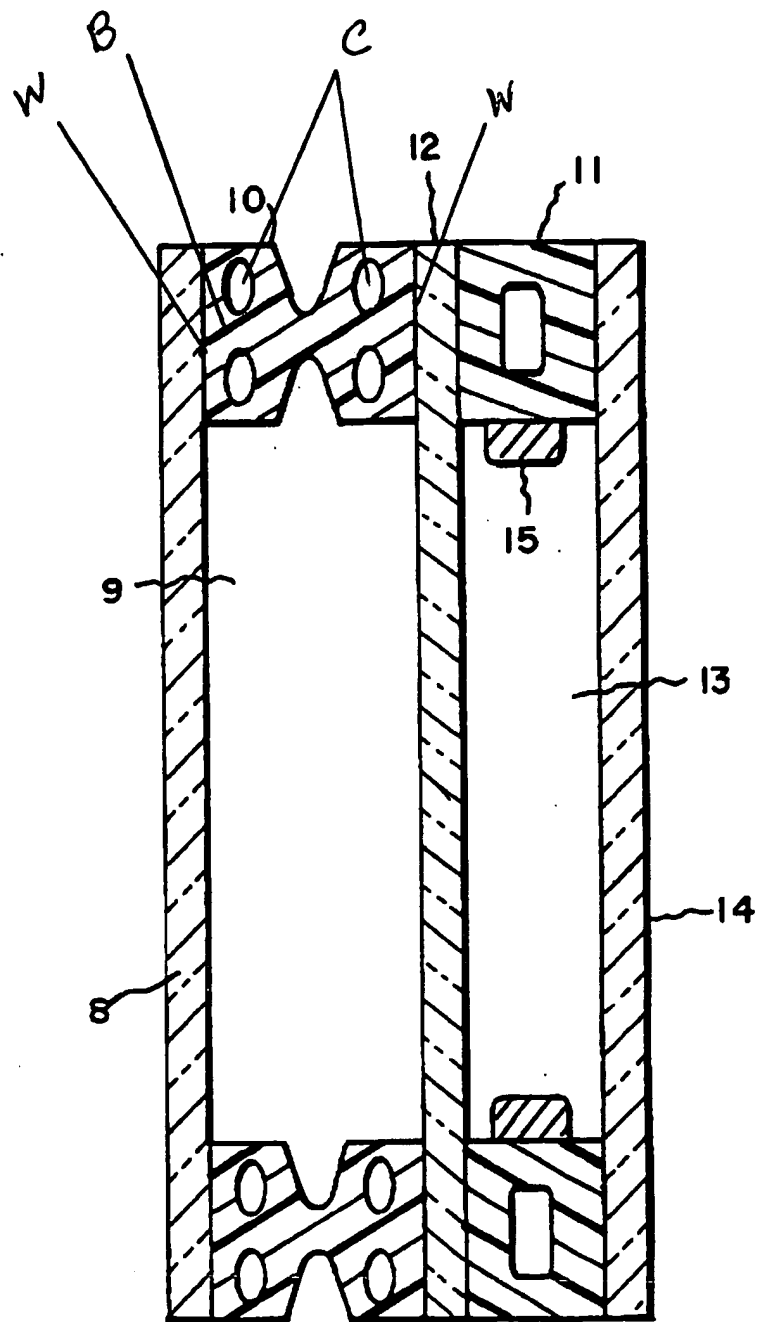


FIG. 2